

Tomorrow's World

Imaginative learning project 1 for year 5/6, term 1, 2020



Text messages, emails, websites, blogs and podcasts—there were so many ways to communicate. Suggest ways of improving your school website and hopefully the headteacher will listen to your ideas! Discover the movers and shakers in the world of technology—the people who've shaped the modern world. Perhaps you might be a visionary for the next generation. Build robots and circuits, break codes and investigate gadgets galore. Why not write a thriller narrative in the style of Anthony Horowitz? Then on request from M199, design a website for a new Spy School. What pages will it need? One for gadgets? A secret lunch menu? You decide! Let's start today on Tomorrow's World!

Computing and Science Focus. Key Facts:

- A **website** is a way of connecting a collection of web pages in one location. The creator of a website will use an address called a **uniform resource locator (URL)**
- A **web page** is a document containing information that can be accessed through the internet. It may also contain **hyperlinks** that can be followed to find out more information.
- A **network** connects different computers and devices so they can share data and access the internet
- A **LAN** (local area network) is used in a specific area, such as in the home, school or office. A **router** connects the computers and devices either through wires or using Wi-Fi
- A **WAN** (wide area network) connects many locations via the internet. Large organisation, such as businesses, use WANs to share information with customers, staff and suppliers who are in different locations. The largest WAN is the internet itself as it connects all locations
- **Programmable technologies** are used in electrical devices to give them instructions eg washing machines
- An **algorithm** is a coded sequence of rules or instructions used to tell a mini computer, called a microprocessor, inside an electrical device how to complete a task

Key Vocabulary

- ⇒ Application: Computer software that performs a task or set of tasks, such as word processing
- ⇒ Bandwidth: The maximum data transfer rate of a network or internet connection. Bandwidth determines how much data can be sent between computers in a given amount of time.
- ⇒ Browser: Software that allows you to browse and view websites. Examples include Internet Explorer, Firefox and Google Chrome
- ⇒ CPU: Central Processing Unit. The main internal component (or brains) of the computer
- ⇒ Database: A collection of interrelated data that is organised in such a way that it can be easily accessed by a computer
- ⇒ Domain: A group of websites on the internet that end with the same letters, such as .co.uk or .com
- ⇒ Encryption: The process of transmitting coded or scrambled data so that only authorised recipients can read it

Homework Projects

- Explain some common computing terms to a friend or family member who might not have heard of them: firewall, app, e-book, emoticon, phishing, wiki, blog and QWERTY
- Write a biography about a significant figure in the computing world. Check facts by cross-referencing different sources
- Make a digital presentation about the web and include guidance for online safety
- Listen to a podcast and make a note of any key facts and information. Report your findings back to the class. Would you recommend they listen to the next one?
- Do some market research. What are the top five websites used by your family and friends? What do they like and dislike about their websites?